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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,646	11/24/2003	Heini Zollinger	0115-032131	4696

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EXAMINER

PARKER, FREDERICK JOHN

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

1

Office Action Summary

Application No.

10/720,646

Applicant(s)

ZOLLINGER, HEINI

Examiner

Frederick J. Parker

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-16,21 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16,21 and 22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/6/06 has been entered.
2. The rejections of the previous Office Action are withdrawn, as they were overcome by Applicant's amendments. An update search discovered new relevant prior art, which is applied as the rejections below.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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5. Claims 11,13-16,22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al US 3801421 in view of Burley et al US 6021646.

Allen et al teaches a porous or permeable granular composite covering (which may be continuous and jointless, e.g. football field, col. 7, 48-51) forming a surfacing, comprising a particulate rubber (e.g. SBR) bonded with a polymeric resin binder (col. 4, 37-62). The surfacing is formed with void space to permit drainage of rainwater due to the permeable nature of the composite (col. 6, 3-7), which prevents pressure build-up/ delamination, and provides a cushion-like feel to the composite. The porous/ permeable composite as described permits downward flow of water from the top surface due to gravity. The rubber particle- resin binder mixture may be continuously applied onto a surface followed by toweling/ tamping (which are compaction/ smoothing steps), or other shaping prior to curing (col. 6, 28-33 and col. 9, 1-6). Heated screed and rollers of claims 14-15 for compacting and texturizing are not explicitly cited. However, it is the Examiner's position that since Allen teaches toweling/ tamping steps, it would have been obvious to use other and known, functionally equivalent means such as a heated screed to provide an equivalent outcome in the process of Allen et al, absent a clear and convincing showing to the contrary. Applying depressions using an uneven pressure embossing step is not cited.

Burley teaches making flooring systems for sports facilities, and includes teaching that top surfaces may be provided with a textured finish using a heated roller or texture wheel embossing means, without limitation on the regularity of textures formed. The texturizing is stated to enhance traction of persons walking or running on the surfaces.

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The references deal with the same subject matter: forming surfaces for sporting or related use with stated improvements as motivation to make the modifications. Since Allen suggests shaping the composite layer before curing, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Allen by incorporating shaping by mechanically texturizing the resultant surface as taught by Burley et al to provide the recognized improvement of enhanced grip/ traction of persons walking or running on the surfaces.

6. Claims 12,21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allen et al US 3801421 in view of Burley et al US 6021646 and further in view of Bull US 4897302.

Allen and Burley are cited for the same reasons previously discussed, which are incorporated herein. Specific particle size ranges of the claims are not cited.

Allen et al teaches on col. 5, 4-7 that particles are “typically” between $\frac{1}{4}$ - $\frac{1}{2}$ ” (about 6.4-12.5 mm) screen openings and retained on #30-40 screens (about 0.425-0.6 mm) and further Ex. 3 teaches particles less than 4.7 mm, which are slightly different from the claims. However, Bull teaches on col. 2, 5-25 the making of a similar porous structure made of a mixture of liquid (polyurethane) polymer binder and rubber particles (0.5-5 mm), the structure containing porous interstices to provide resiliency, and the advantage of improved grip on athletic surfaces. Thus Bull also teaches effective particle size ranges of rubber particles mixed with a polymer binder which provides effective porous surfacing composites. The particle sizes of Bull overlap those of Applicants’ claims. The subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made if the overlapping portion of the particle sizes disclosed by the reference were selected because overlapping ranges have been held to be a

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prima facie case of obviousness, see *In re Wortheim* 191 USPQ 90. It is also noted Bull's upper particle size ranges overlap those of Allen et al which are also presented as effective to form void space to permit water drainage.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to carry out the process of Allen in view of Burley by incorporating the guidance on particle size of the rubber particles presented by Bull to provide rubber particle-polymer composites having porosity/ void space which permits drainage of water.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick J. Parker whose telephone number is 571/ 272-1426. The examiner can normally be reached on Mon-Thur. 6:15am -3:45pm, and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571/272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Frederick J. Parker
Primary Examiner
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